

**NATIONAL TRAFFIC MANAGEMENT LOG PROGRAM
USER NOTES, VERSION 3.00**

FOR

**ENHANCED TRAFFIC MANAGEMENT SYSTEM (ETMS)
SOFTWARE SUPPORT**

TASK XII, PART 1

OF THE

**EN ROUTE SOFTWARE DEVELOPMENT AND SUPPORT III
(ERSDS III) CONTRACT**

Contract No. DTFA01-00-C-0047

DCN:

November 18, 2002

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1 Introduction

The purpose of this document is to provide information regarding additions and modifications made to the Traffic Management Log software in version 3.00. Listed below is an overview of the changes:

- ❑ The first phase of GUI improvements has been implemented.
- ❑ The first phase of menu redesign has been implemented.
- ❑ The first phase of Multiple Airport Configuration has been implemented.
- ❑ The *Delay* panel has been modified to handle multiple delays.
- ❑ The TM Log program can now be configured to carry over the causal factors selection to subsequent entries until changed.
- ❑ The TM Log program now supports the use of aliases for slash-delimited lists.
- ❑ Miscellaneous changes to the following functional areas: Restrictions, Ground Stops, Free Form, and the Pending List.
- ❑ The *Internal View* dialog has been modified.
- ❑ An airport query tool has been added.
- ❑ The *SISO* panel has been modified.

2 GUI Improvements

The first phase of GUI improvements has been implemented in this release. Following is a summary of the changes:

- ❑ Improved alignment of data fields.
- ❑ Improved use of real estate.
- ❑ Use of color, italics, and asterisks to denote required fields.
- ❑ Cursor is placed into the first input field when a tab is selected.
- ❑ Single clicking an input field allows the user to edit the field from the cursor.
- ❑ Double clicking highlights the entire input field, allowing the user to either clear the field (backspace or delete), or begin typing to replace the contents of the field.
- ❑ Improved consistency of data items across all panels (i.e. button size and names).
- ❑ Improved tab sequence through the panels and additional tool tips.

Figure 2-1 shows the new condensed login screen and Figure 2-2 shows the TM Log interface as it appears after logging in. Both pictures feature the TM Log interface's new look and feel. The tabs to access the panels are now located on the left side of the interface instead of across the top. To accommodate this new design, the panel names have been abbreviated as shown in Figure 2-3.



Traffic Management Log

 **Federal Aviation Administration**
Traffic Management Log

05 Sep 2002 18:00 Version 3.00

*Specialist ID: /

*Position: ▼

Facility:

*Time:

Figure 2-1 TM Log login screen

Traffic Management Log

Options Edit View Tools Information Print Reports Link Search Help

Misc
RSTN
MRSTN
GStop
APREQ
Delay
RWY
Sum
EQ
Log
SISO

05 Nov 2002 19:13
DCC Position 11 Albert Einstein
*Event Time: 1913

*Request Type:
☒ Initiate ☐ Edit ☐ Cancel ☐ Delete

Type of Log Entry
☐ Equipment ☐ NRP ☐ QAR ☐ Emergency ☒ General
☐ Weather ☐ Sig Act ☐ Usr Cmt ☐ Local Only

Forward To Position:
☐ NOM ☐ SPT ☐ TCA ☐ East NTMO ☐ West NTMO
☐ SWX ☐ CSA
☐ Position(/):

Forward To Facility:
☐ Facility(/):

*Remarks:

Submit Clear Spelling

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Figure 2-2 TM Log interface after login

Old Name	New Name
Free Form	Misc
Delcing	ICE
Restriction	RSTN
Ground Stop	GStop
Delays	Delay
SWAP	SWAP
Airport Configuration	RWY
Airport Traffic Counts	Count
Shift Summary	Sum
Telcon Log	Telcon
Approval Request	APREQ
PiRep	PIREP
Monitor Alert	MA
SISO	SISO
Current Log	Log
MultiRSTN	MRSTN
SUA	SUA
Outage	EQ
HVR Critique	HVR

Figure 2-3 Table of panel name changes

Notes:

- ❑ The tabs shown in Figure 2-2 are the default tabs in their default order.
- ❑ The color of the *Log* tab has been changed from green to blue and the color of the *SISO* tab has been changed from blue to black.
- ❑ The font color of the status line has been changed from yellow to blue as shown in Figure 2-4.

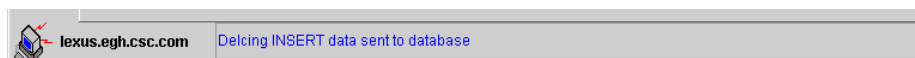


Figure 2-4 Status line

- ❑ All dialog windows can now be closed using their built in window decorations (i.e. the X in the upper right corner in Windows) regardless of whether or not a cancel button is present.

3 Menu Redesign

The first phase of the TM Log menu redesign has been implemented in this release. Changes have been made to all the menus except the *Link* and *Search* menus. Changes to the *Link* menu were implemented in v2.06.

3.1 Options Menu

The *Configure* menu has been renamed to *Options* and includes the following changes, as shown in Figure 3-1:

- ❑ A *Save* button has been added to the *Input Tabs* and *Subscriptions* dialogs.
- ❑ The *Spell Checker Options* menu option has been renamed to *Spell Check Config*.
- ❑ The *Change Colors* menu option has been renamed to *Colors* and its submenu now has a *Default* option, which restores the system default colors. A *Save* button has been added to the *Change Background* and *Change Foreground* dialogs.
- ❑ The *Change Font* menu option has been renamed to *Fonts*.
- ❑ An *Exit* menu option has been added. Selecting this option has the same effect as selecting the *Sign Off & Exit* button on the *SISO* panel.

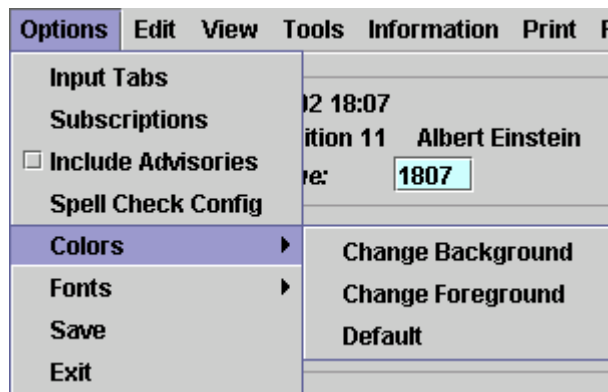


Figure 3-1 Options menu

3.2 Edit Menu

The following changes have been made to the *Edit* Menu, as shown in Figure 3-2:

- ❑ The *copy-to-clipboard* menu option has been renamed to *Copy*.
- ❑ The *cut-to-clipboard* menu option has been renamed to *Cut*.
- ❑ The *paste-to-clipboard* menu option has been renamed to *Paste*.

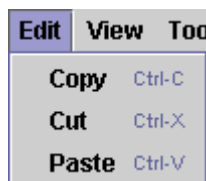


Figure 3-2 Edit menu

3.3 View Menu

The following changes have been made to the *View* menu, as shown in Figure 3-3:

- ❑ A *Current Log View* menu option has been added. Selecting this option displays the current log in a new window.
- ❑ Under the *Create View...* submenu:
 - The *Create External View* option has been renamed to *External View*.
 - The *Create Internal View* option has been renamed to *Internal View*.

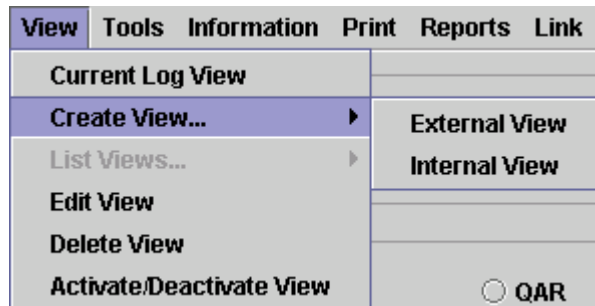


Figure 3-3 View menu

3.4 Tools Menu

The following changes have been made to the *Tools* menu, as shown in Figure 3-4:

- ❑ A *Spell Check* menu option has been added. This option is currently disabled, as its functionality has not yet been implemented.
- ❑ The *Clear History/Recovery Files* menu option has been renamed to *Clear History Files*.

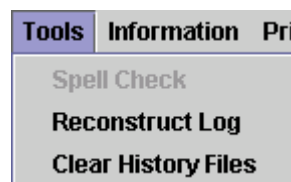


Figure 3-4 Tools menu

3.5 Information Menu

The following changes have been made to the *Information* menu, as shown in Figure 3-5:

- ❑ The *Show Current Log* menu option has been removed.
- ❑ The *Show Any Log* menu option has been removed.
- ❑ The *Show Registered User List* menu option has been renamed to *Facility OI List*.
- ❑ The *Show Current Users* menu option has been removed.
- ❑ The *Show Translations* menu option has been renamed to *Aliases*.
- ❑ An *All-Airport Information* option has been added. See section 12 for details.
- ❑ The *Show Logged On Users* menu option has been renamed to *Logged On Users*.



Figure 3-5 *Information menu*

3.6 Print Menu

The following changes have been made to the *Print* menu, as shown in Figure 3-6:

- ❑ The *Current Log* and *Any Log* menu options have been removed.
- ❑ A *My Log* menu option has been added. This option prints the current log for the position in the format specified in the TM Log configuration file.
- ❑ A *Facility Log* menu option has been added. This option prompts the user for a date and prints the corresponding logs for all positions at the local facility in the format specified in the TM Log configuration file.
- ❑ An *Other Logs* menu option has been added. This option prompts the user for a date, a slash-delimited list of facilities, and a slash-delimited list of positions and prints the corresponding logs in plain text.

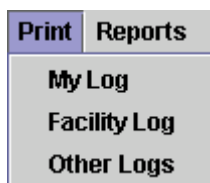


Figure 3-6 *Print menu*

3.7 Reports Menu

The following changes have been made to the *Reports* menu, as shown in Figure 3-7:

- ❑ The *Report By Facility (Local)*, *Report By Position*, and *Report Any Log* menu options have been removed.
- ❑ A *Log Report* menu option has been added. This option is a GUI implementation of the LogReport command line report. The GUI implementation has the additional capability of ordering any report by position, whether the report is requested for a specified list of positions or all positions.
- ❑ A *Link Report* menu option has been added. This option is a GUI implementation of the LinkSummaryReport command line report.
- ❑ A *Shift Summary Report* menu option has been added. This option is a GUI implementation of the ShiftSummaryReport command line report.
- ❑ An *HVR Critique Report* menu option has been added. This option is a GUI implementation of the HvrcritiqueReport command line report.
- ❑ A *NAS Summary Report* menu option has been added. This option is a GUI implementation of the TMLogSummaryReport command line report.

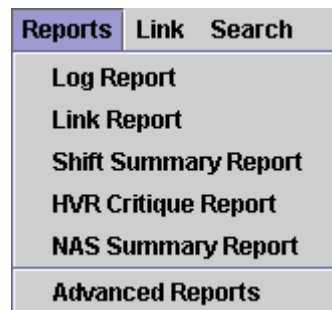


Figure 3-7 Reports menu

3.8 Help Menu

The following changes have been made to the *Help* menu, as shown in Figure 3-8:

- ❑ A *Quick Reference* menu option has been added. This option is currently disabled, as its functionality has not yet been implemented.
- ❑ The *Submit Comments* menu option has been renamed to *Feedback To Developer*.

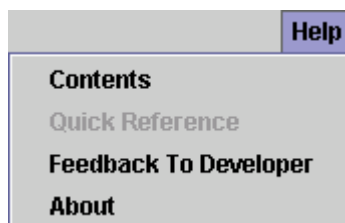


Figure 3-8 Help menu

4 Multiple Airport Configuration

The first phase of enhancements to airport configuration has been implemented. The panel has been revamped to allow users to enter up to fourteen configurations in a single transaction. Each configuration will result in a separate log entry. The panel may appear blank in its default state, as shown in Figure 4-1, or may be pre-filled with data for a default set of airports defined in the TM Log configuration file.

Traffic Management Log

Options Edit View Tools Information Print Reports Link Search Help

Misc
RSTN
MRSTN
GStop
APREQ
Delay
RWY
Sum
EQ
Log
SISO

05 Nov 2002 19:18
DCC Position 11 Albert Einstein
*Event Time: 1918

*Request Type:
☒ Initiate ☐ Edit ☐ Cancel ☐ Delete

	* Apt	Approach	* Arrival Runways	* Departure Runways	AAR	ADR	Rmks	
<input type="radio"/>							Rmk	<input type="radio"/>
<input type="radio"/>							Rmk	<input type="radio"/>
<input type="radio"/>							Rmk	<input type="radio"/>
<input type="radio"/>							Rmk	<input type="radio"/>
<input type="radio"/>							Rmk	<input type="radio"/>
<input type="radio"/>							Rmk	<input type="radio"/>
<input type="radio"/>							Rmk	<input type="radio"/>
<input type="radio"/>							Rmk	<input type="radio"/>
<input type="radio"/>							Rmk	<input type="radio"/>
<input type="radio"/>							Rmk	<input type="radio"/>
<input type="radio"/>							Rmk	<input type="radio"/>
<input type="radio"/>							Rmk	<input type="radio"/>
<input type="radio"/>							Rmk	<input type="radio"/>
<input type="radio"/>							Rmk	<input type="radio"/>
<input type="radio"/>							Rmk	<input type="radio"/>

Edit

☐ Rmk

Submit Clear

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Figure 4-1 RWY panel

The panel contains identical sets of fields, one for each airport configuration. Fill out the panel as follows:

1. Select the radio button at the beginning of an available line. The *Edit* section will be grayed out.
2. Enter the desired airport in the *Apt* field. The *Approach*, *Arrival Runways* and *Departure Runways* combo boxes will be filled in with selectable values when this field no longer has the focus.
3. Make a selection from the *Approach* combo box.
4. Make a selection from the *Arrival Runways* combo box.
5. Make a selection from the *Departure Runways* combo box.
6. Enter desired value in the *AAR* field. Suggested but "Optional".
7. Enter desired value in the *ADR* field. Suggested but "Optional".
8. Select the radio button next to the *Rmk* button to group the remarks into a color category. This button toggles through four possible colors (red, blue, green, and yellow). All airports in the same color category will have the same remarks and changing one will change them all. If the button is left blank, the remarks will be unique to the corresponding airport.
9. Select the *Rmk* button to open the remarks window, shown in Figure 4-2.

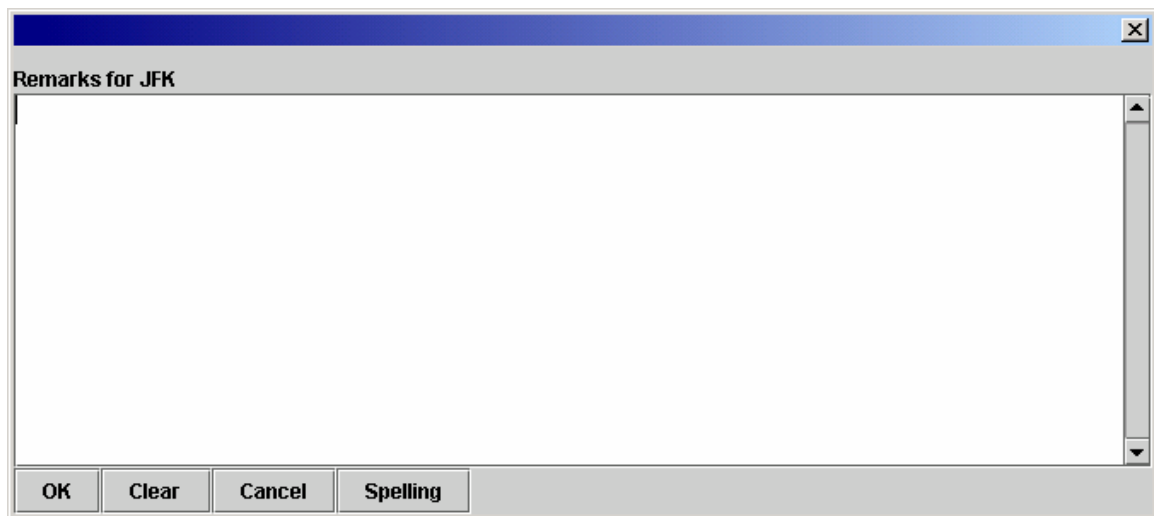


Figure 4-2 Remarks window

10. Enter remarks in the text area and select OK. The window will close and the *Rmk* button will become highlighted as shown in Figure 4-3.



Figure 4-3 Highlighted *Rmk* button

11. Repeat steps 1 – 10 for each airport and then select *Submit*. Note: In the log, each entry will now have "DEP:" prefixed to its list of departure airports.

If an airport configuration entry is selected from the log for editing, its data will populate the corresponding fields in the *Edit* section at the bottom of the panel and the lines for entering new entries will be grayed out. When the entry to be edited matches a pre-filled entry in the new entry area, that entry will be updated with the modifications made.

5 Multiple Delays

The *Delay* panel, shown in Figure 5-1, has been revamped to allow users to enter up to eight delays in a single transaction. All delays entered in a transaction will be combined in a single log entry.

Traffic Management Log

Options Edit View Tools Information Print Reports Link Search Help

Misc
RSTN
MRSTN
GStop
APREQ
Delay
RWY
Sum
EQ
Log
SISO

05 Nov 2002 19:21
DCC Position 11 Albert Einstein
*Event Time: 1921

*Request Type:
☒ Initiate
 ☐ Edit
 ☐ Cancel
 ☐ Delete

Type of Delay:
☒ Arrival
 ☐ Departure
 ☐ Enroute

*CausFac

*Facility Holding:

*DEST Airport:

	*Length	*DelayTime	Number of AC		*Length	*DelayTime	Number of AC
<input checked="" type="radio"/> + <input type="radio"/> -				<input checked="" type="radio"/> + <input type="radio"/> -			
<input checked="" type="radio"/> + <input type="radio"/> -				<input checked="" type="radio"/> + <input type="radio"/> -			
<input checked="" type="radio"/> + <input type="radio"/> -				<input checked="" type="radio"/> + <input type="radio"/> -			
<input checked="" type="radio"/> + <input type="radio"/> -				<input checked="" type="radio"/> + <input type="radio"/> -			

Remarks:

Submit Clear Spelling

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Figure 5-1 Delay panel

The event time, request type, type of delay, causal factors, facility holding, destination/departure airport, and remarks will be common to all delays in a particular entry and will be entered the same as in previous TM Log releases. The rest of the panel contains two columns of identical sets of fields, one set for each delay. Fill out this part of the panel as follows:

1. Select type of delay *Arrival*, *Departure* or *Enroute*.
2. Select *Casual Factor*.
3. *Facility Holding /DEST Airport* or *DPT Airport* fields change depending on the type of delay enter appropriate information.
4. At the beginning of an available line in either column, select either the positive or negative radio button to indicate a positive or negative delay.
5. For the *Length* field, select a value from the combo box or manually enter a multiple of fifteen.
6. Enter the time of delay in the *Delay Time* field.
7. Enter the number of aircraft in the *Number of AC* field.
8. Repeat steps 4 – 8 for each delay and then select *Submit*.

The order of processing is by rows, not by columns. You can enter delay times in any order, but they will be processed from left to right.

If a delay entry is recalled from the log for editing, the panel will be populated with all of the delay information that was originally submitted.

6 Causal Factors

A new optional feature has been implemented to allow a log entry's causal factor to be carried over to subsequent log entries. When the TM Log program is started, the causal factor field on all panels will be blank. After a log entry containing a causal factor is submitted, all panels that have a causal factor field will automatically be pre-filled with the selected causal factor. If the causal factor on any panel is subsequently changed, all panels with a causal factor field will be updated with the new causal factor when the entry is submitted.

7 Aliases

The TM Log now supports the use of aliases. This feature allows users to enter an abbreviation in any text field where a slash-delimited list is usually entered. The TM Log program will automatically translate the alias into its corresponding slash-delimited list when the entry is submitted. If the translated list is longer than the text field, it will be truncated, without warning, at the last slash before the length of the field. The log entry will contain the translated slash-delimited list and this is what will be returned to the panel if the entry is selected for editing. To view a list of aliases available, select *Aliases* from the *Information* menu. A new window will be displayed, as shown in Figure 7-1.

PLUGH	JFK/EWR
XYZZY	ACY/PHL/BWI
X33	LAX/SFO/SAN/OAK

Figure 7-1 Alias translation list

8 Changes to Restriction Functionality

The following subsections describe software changes that affect both the *RSTN* (single restriction) and *MRSTN* (multiple restriction) panels and their underlying processing.

8.1 Internal Restrictions

The TM Log program can now process internal restrictions through the existing single and multiple restriction panels. Internal restrictions are restrictions imposed on an area within a facility by another area within that same facility. The facility has approving authority and ATCSCC approval is not required.

A list of potential candidates for internal restrictions will be defined in the TM Log configuration file. The requesting and providing facilities will be checked against this list when a restriction is submitted. If a match is found in either, the restriction will be processed as an internal restriction and will not go to ATCSCC for approval.

Notes:

- ❑ DSP and APREQ restrictions will be treated as internal restrictions.
- ❑ Internal restrictions will only appear in an internal view.

8.2 Personal Restrictions

Users can now add restrictions to their personal restriction list by submitting them with the *Add to myRestrictions* checkbox selected. The checkbox will be automatically cleared after the entry is submitted.

The text in the *Personal Restriction List* will no longer be colored, as shown in Figure 8-1.

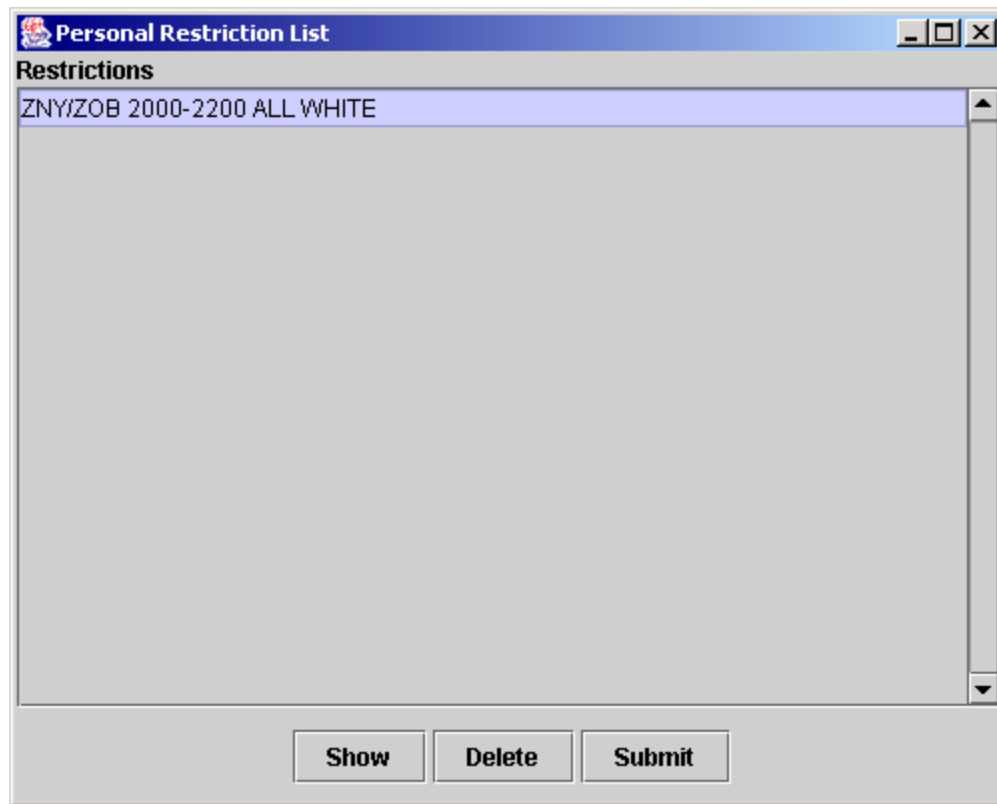


Figure 8-1 *Personal Restriction List* dialog

8.3 Other Changes

- ❑ Users are no longer required to enter a NAS element when the *Airport* field is filled in.
- ❑ On the *MRSTN* panel, the radio button at the beginning of an entry line will be automatically selected when something is typed into any text field on that line.
- ❑ On the *RSTN* panel, users are no longer required to enter an MIT or MINIT if either the *Altitude* or *Speed* button is selected.
- ❑ The *RSTN* panel, shown in Figure 8-2, now has a *Type* button like the *MRSTN* panel that toggles between *MIT*, *MINIT*, *APREQ*, and *DSP*.

Traffic Management Log

Options Edit View Tools Information Print Reports Link Search Help

Misc
RSTN
 MRSTN
 GStop
 APREQ
 Delay
 RWY
 Sum
 EQ
 Log
 SISO

05 Nov 2002 20:28
 DCC Position 11 Albert Einstein
 *Event Time: 2028

*Request Type:
☒ Initiate ☐ Modify ☐ Cancel ☐ Delete

Aircraft Type:
☒ All ☐ Jet ☐ Prop ☐ Other:

Originator:

Approval: ☒ Approve ☐ Disapprove

*Requesting:

*Providing (I):

*Start Time: *End Time:

*CausFac:

Restriction:
☒ EnRoute ☐ Departure ☐ Arrival

*Type: *MIT:

☐ Altitude:

☐ Speed:

Airport (I):

*NAS Element (I):

Qualifier: NONE

Impacted Elmnts (I):

Exclusions:

Justification/Remarks

ATCSCC Remarks/Critique:

Submit Clear Spelling myRstns

☐ Add to myRestrictions

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Figure 8-2 RSTN panel

9 Changes to Ground Stop Functionality

- ❑ The *Exclusions* field on the *GStop* panel will now accept slash-delimited lists.
- ❑ If the *End Time* field is left blank when entering a ground stop in the *GStop* panel, the end time will no longer be assumed to be thirty minutes after the start time. No end time will be reflected in the log entry.

10 Changes to Free Form Functionality

- The *Misc* panel now has separate sections for internal forwarding (forwarding to a position within the same facility) and external forwarding (forwarding to another facility), as shown in Figure 10-1.

The screenshot displays the 'Traffic Management Log' application window. The 'Misc' panel is selected in the left-hand menu. The main area contains the following elements:

- Header:** '05 Nov 2002 20:29', 'DCC Position 11 Albert Einstein', and '*Request Type:' with radio buttons for 'Initiate' (selected), 'Edit', 'Cancel', and 'Delete'.
- *Event Time:** A text field containing '2029'.
- Type of Log Entry:** A group of radio buttons including 'Equipment', 'NRP', 'QAR', 'Emergency', 'General' (selected), 'Weather', 'Sig Act', 'Usr Cmt', and 'Local Only'.
- Forward To Position:** A section with checkboxes for 'NOM', 'SPT', 'TCA', 'East NTMO', 'West NTMO', 'SWX', 'CSA', and a 'Position(/):' text field.
- Forward To Facility:** A section with a 'Facility(/):' text field.
- *Remarks:** A large, empty text area for notes.
- Buttons:** 'Submit', 'Clear', and 'Spelling' at the bottom.
- Footer:** A logo and the URL 'lexus.egh.csc.com'.

Figure 10-1 Misc Panel

- ❑ Selecting Position(/): from Forward to Positions, brings up the *Facility Positions* dialog which now has a *Cancel* button, as shown in Figure 10-2.

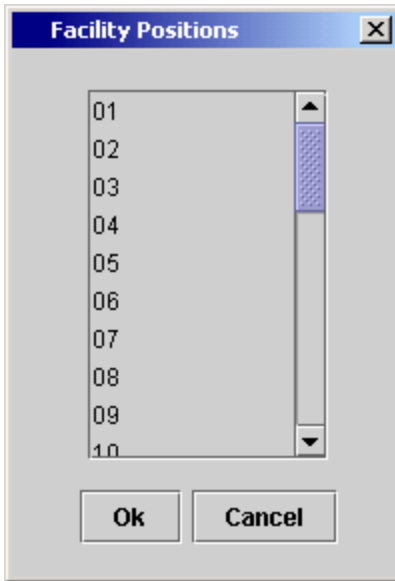


Figure 10-2 *Facility Positions* dialog

11 Changes to Pending List Functionality

- ❑ The *Others* dialog will now display emergency messages in bold and prefixed with “EMERGENCY”, as shown in Figure 11-1.
- ❑ All dialogs formerly had an *Expand* button to display the selected message. This button is now labeled *Show*, as shown in Figure 11-1.

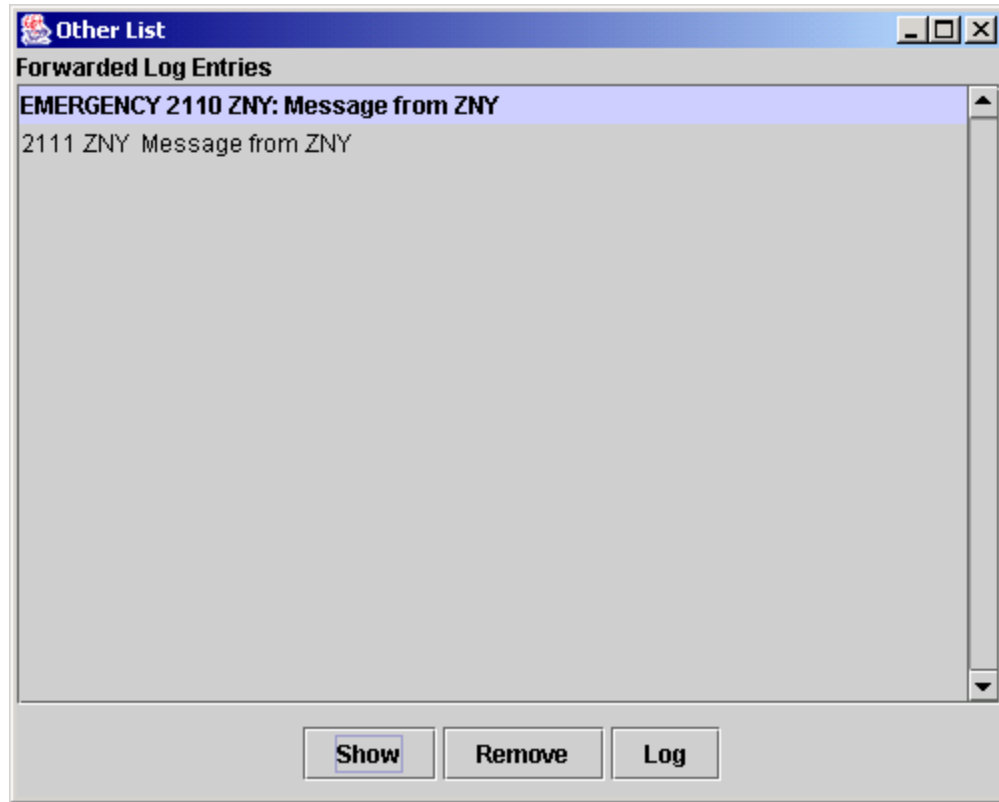


Figure 11-1 *Others* dialog

- ❑ Displayed entries are now word wrapped and scrolling horizontally is no longer required.
- ❑ The main application window no longer loses the focus when the *Pending* window is updated.

- ❑ At DCC only, the *Log* button on the *Restrictions* dialog has been replaced with a *Disapprove* button, as shown in Figure 11-2. Select this button to disapprove pending restrictions and enter them into the log.

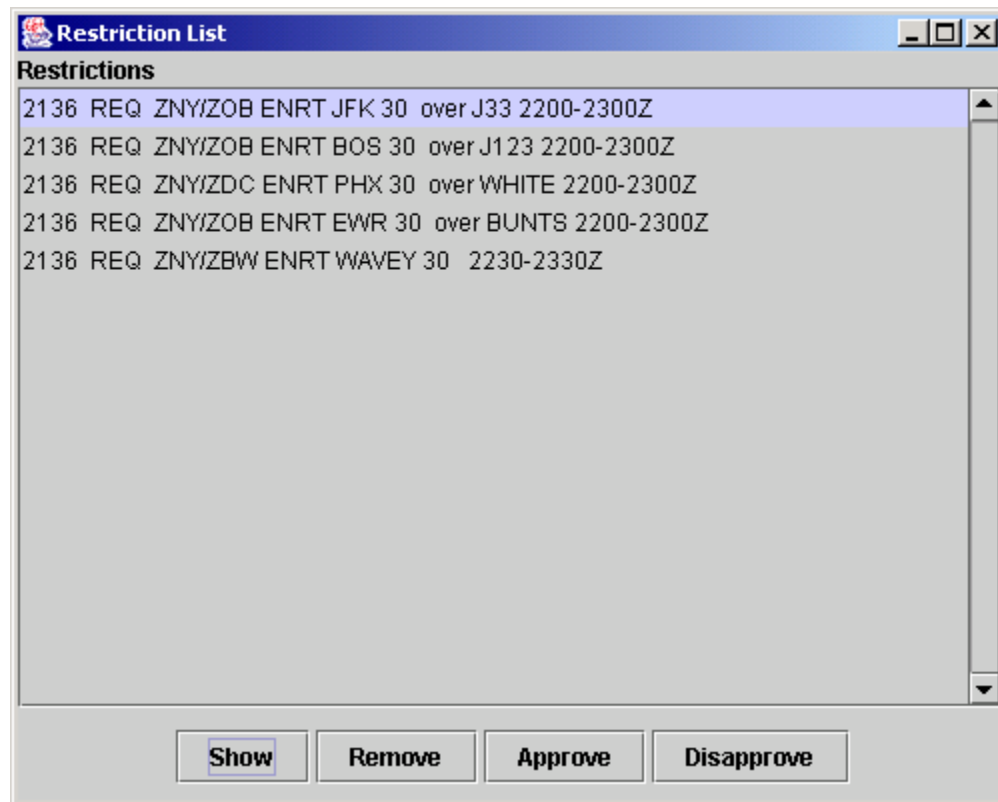


Figure 11-2 Restrictions dialog

12 Miscellaneous

- ❑ The *Internal View* dialog, shown in Figure 12-1, now has a *Select ALL* and a *CLEAR* button. All checkboxes are initially selected.

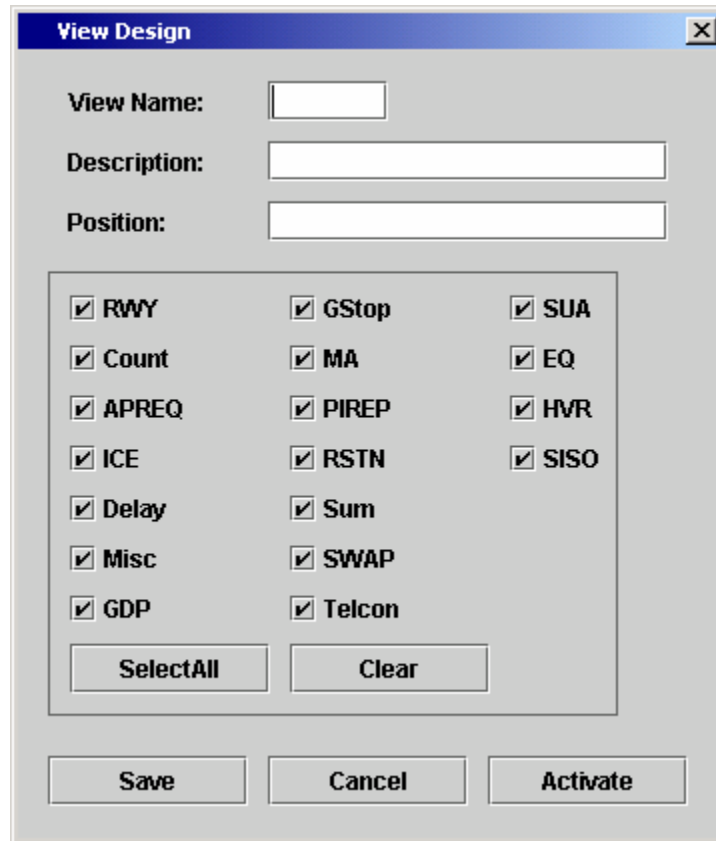


Figure 12-1 *Internal View dialog*

- ❑ Users can now retrieve information on any airport or a slash-delimited list of airports by selecting the *All-Airport Information* option from the *Information* menu. A confirmation dialog will be displayed, as shown in Figure 12-2.

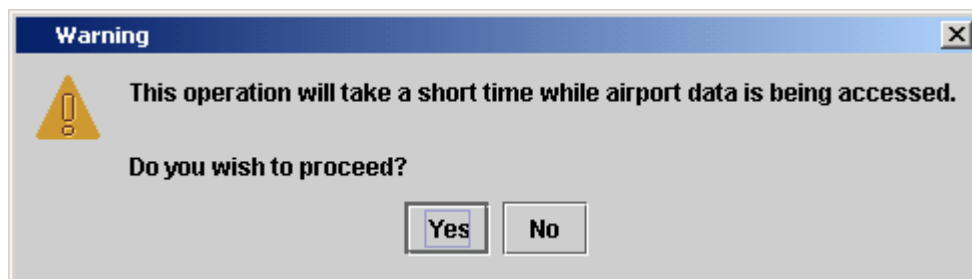


Figure 12-2 *All-Airport Information confirmation dialog*

If *Yes* is selected, an input dialog will be displayed, as shown in Figure 12-3.

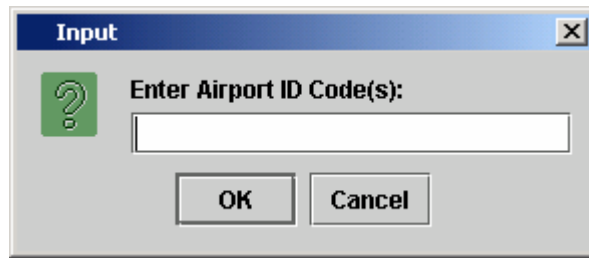


Figure 12-3 All-Airport Information input dialog

After entering the desired airport(s) and selecting *OK*, the airport information will be displayed in a new window, as shown in Figure 12-4.

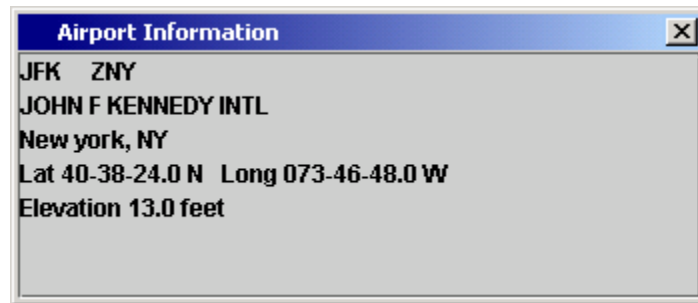



Figure 12-4 Airport Information window

- ❑ The *Specialist ID* field on the *SISO* panel now has a separate text box for entering a trainee's operator initials and the *Trainee Access Level* check box has been eliminated, as shown in Figure 12-5.

Traffic Management Log

Options Edit View Tools Information Print Reports Link Search Help

Misc
RSTN
MRSTN
GStop
APREQ
Delay
RWY
Sum
EQ
Log
SISO



Federal Aviation Administration
Traffic Management Log

05 Nov 2002 22:02
DCC Position 11 Albert Einstein
*Event Time: 2202

Specialist ID: /

Position: 11 ▼

SISO Type:

Sign Off & Exit
Sign Off User
Sign On User
Replace User
Combine
Sign Off, Print & Exit

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Figure 12-5 SISO panel